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G79-436 Control of Downy Brome in Alfalfa

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Control of Downy Brome in Alfalfa

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Downy brome in alfalfa indicates poor alfalfa management or failure to control downy brome around field boundaries. It lowers the quality of the first cutting of hay, but can be controlled by one or more of the following: (1) planting in downy brome-free soil, (2) maintaining good vigorous alfalfa stands, (3) using adapted varieties, (4) having adequate fertility - especially phosphorus in the soil, (5) applying timely and correct amounts of irrigation water, (6) controlling downy brome in adjacent areas, and (7) use of herbicides.

Downy brome cannot compete with a vigorous growth of alfalfa. Most productive stands of alfalfa in Nebraska only last 3 to 5 years. If alfalfa stands are deteriorating, destroy the alfalfa and plant to spring crops until downy brome is controlled. It is not practical to seed alfalfa in downy brome infested fields even though we have herbicides that will control downy brome in the seedling stage.

Five herbicides are available for use on alfalfa. Current information is available in *A Guide for Herbicide Use in Nebraska,* EC-130. Apply Princep 80W (simazine) at the rate of 1 to 1.75 lb/A in the fall after the last cutting, but before the soil freezes. Application may be made to alfalfa that is actively growing or dormant, but alfalfa should be established for at least one year.

Do not use Princep on sand, loamy sand or gravely areas as injury to the alfalfa may occur. Injury to alfalfa may also occur if it is used on highly calcareous or highly alkaline soils.

Chem-Hoe 4 FL (Propham) may be applied to established alfalfa and to alfalfa seedlings that have three or more true leaves. Apply 3 to 4 quarts/A when the soil temperature is below 55°F. Vapor losses may occur if it is applied to warmer soils. Moisture is necessary to activate Chem-Hoe. Best results are obtained if Chem-Hoe is applied in 20 to 60 gallons of water per acre for ground application and 5 to 10 gallons per acre for aerial application. Best control is obtained if it is applied prior to mid-March. Control diminishes rapidly as the temperatures warm and the downy brome matures.

Kerb 50W (pronamide) may be applied to established alfalfa or to seedling alfalfa after the first trifoliolate leaf stages. Kerb should be applied in the fall or prior to mid-March, before germination, for best results. Moisture is needed for activation. Best results are obtained if Kerb is applied in 20 to 50 gallons per acre of water for ground application and 5 to 10 gallons per acre for aerial application. Rate

of Kerb varies with weed species. Apply Kerb 50W at 1.5 to 2 lb/A if rainfall is limited. Under center pivot irrigation, or if rainfall chances are good, rates are 1 to 1.5 lb/A. Kerb 50W may control annual grasses that germinate in the early spring.

Sinbar 80W (terbacil) at 0.75 to 1 lb/A should be applied in 40 gallons per acre of water on established alfalfa that is at least one year old. It may be applied in the fall or spring prior to new growth. Caution should be used in applying Sinbar 80W to similar soils that cause Princep injury.

Sencor or Lexone 50W or 4L (metribuzin) should be applied at 1 lb/A in 20 to 40 gallons per acre of water in the fall after growth ceases or in the early spring before growth starts.

*For a plant description of downy brome, refer to NebGuide *G78-422, Downy Brome Control*.

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